

AMENDMENTS TO THE CLAIMS

1. **(Currently Amended)** A novel isolated nucleic acid molecule ~~in isolated form~~ wherein said nucleic acid molecule ~~comprises~~, comprising a novel DEC-205 intergenic splice variant or a derivative, homologue or analogue thereof.

2. **(Currently Amended)** The novel nucleic acid molecule according to claim 1 wherein said nucleic acid molecule ~~comprises~~ intergenic splice variant is a DEC-205/DCL-1 intergenic splice variant or a derivative, homologue or analogue thereof.

3. **(Original)** The nucleic acid molecule according to claim 2 comprising a nucleotide sequence encoding or a nucleotide sequence complementary to a nucleotide sequence encoding an amino acid sequence substantially as set forth in SEQ ID NO: 2 or SEQ ID NO: 21 or a derivative, homologue or mimetic thereof or having at least about 45% or greater similarity to at least 30 contiguous amino acids in SEQ ID NO: 2 or SEQ ID NO: 21 or a derivative, homologue or analogue of said nucleic acid molecule.

4. **(Original)** The nucleic acid molecule according to claim 2 in isolated form comprising a nucleotide sequence substantially as set forth in SEQ ID NO: 1 or SEQ ID NO: 20 capable of hybridising to the sequence set forth in SEQ ID NO: 1 or SEQ ID NO: 20 under low stringency conditions at 42°C or a derivative, homologue or analogue of said nucleic acid molecule.

5. **(Original)** The nucleic acid molecule of claim 4 wherein said nucleic acid molecule is a cDNA molecule.

6. **(Currently Amended)** The nucleic acid molecule according to claim 4 ~~or 5~~ which encodes an amino acid sequence corresponding to an amino acid sequence set forth in SEQ ID NO: 2 or SEQ ID NO: 21 or a sequence having at least about 45% similarity to at least 30 contiguous amino acids in SEQ ID NO: 2 or SEQ ID NO: 21 or a derivative, homologue or analogue of said nucleic acid molecule.

7. **(Original)** The nucleic acid molecule according to claim 6 comprising a sequence of nucleotides substantially as set forth in SEQ ID NO: 1 or SEQ ID NO: 20.

8. **(Original)** The nucleic acid molecule according to claim 2 comprising a nucleotide

sequence encoding or a nucleotide sequence complementary to a nucleotide sequence encoding an amino acid sequence substantially as set forth in SEQ ID NO: 5 or a derivative, homologue or mimetic thereof or having at least about 45% or greater similarity to at least 30 contiguous amino acids in SEQ ID NO: 5 or a derivative, homologue or analogue of said nucleic acid molecule.

9. (Original) The novel nucleic acid molecule according to claim 2 comprising a nucleotide sequence substantially as set forth in SEQ ID NO: 4 or a nucleotide sequence capable of hybridising to the sequence set forth in SEQ ID NO: 4 under low stringency conditions at 42°C or a derivative, homologue or analogue of said nucleic acid molecule.

10. (Original) The nucleic acid molecule according to claim 9 wherein said nucleic acid molecule is a cDNA molecule.

11. (Currently Amended) The nucleic acid molecule according to claim 9 or 11 which encodes an amino acid sequence corresponding to an amino acid sequence set forth in SEQ ID NO: 5 or a sequence having at least 45% similarity to at least 30 contiguous amino acids in SEQ ID NO: 5 or a derivative, homologue or analogue of said nucleic acid molecule.

12. (Original) The novel nucleic acid molecule according to claim 2 comprising a nucleotide sequence substantially as set forth in SEQ ID NO: 32 or a nucleotide sequence capable of hybridising to the sequence set forth in SEQ ID NO: 32 under low stringency conditions at 42°C or a derivative, homologue or analogue of said nucleic acid molecule.

13. (Original) The nucleic acid molecule according to claim 12 wherein said nucleic acid molecule is a genomic molecule.

14. (Currently Amended) The nucleic acid molecule according to claim 12 or 13 which encodes an amino acid sequence corresponding to an amino acid sequence set forth in SEQ ID NO: 5 or a sequence having at least about 45% similarity to at least 30 contiguous amino acids in SEQ ID NO: 5 or a derivative, homologue or analogue of said nucleic acid molecule.

15. (Original) The nucleic acid molecule according to claim 2 comprising a nucleotide sequence encoding or a nucleotide sequence complementary to a nucleotide sequence encoding an amino acid sequence substantially as set forth in SEQ ID NO: 8 or a derivative, homologue or mimetic thereof or having at least about 45% or greater similarity to at least 30 contiguous amino acids in SEQ ID NO: 8 or a derivative, homologue or analogue of said nucleic acid molecule.

16. (Original) The nucleic acid molecule according to claim 2 comprising a nucleotide

sequence substantially as set forth in SEQ ID NO: 7 or a nucleotide sequence capable of hybridising to the sequence set forth in SEQ ID NO: 7 under low stringency conditions at 42°C or a derivative, homologue or analogue of said nucleic acid molecule.

17. (Original) The nucleic acid molecule according to claim 16 wherein said nucleic acid molecule is a cDNA molecule.

18. (Currently Amended) The nucleic acid molecule according to claim 16 or 17 which encodes an amino acid sequence corresponding to an amino acid sequence set forth in SEQ ID NO: 8 or a sequence having at least about 45% similarity to at least 30 contiguous amino acids in SEQ ID NO: 8 or a derivative, homologue or analogue of said nucleic acid molecule.

19. (Original) The nucleic acid molecule according to claim 2 comprising a nucleotide sequence encoding or a nucleic acid molecule sequence complementary to a nucleotide sequence encoding an amino acid sequence substantially as set forth in SEQ ID NO: 11 or a derivative, homologue or mimetic thereof or having at least about 45% or greater similarity to at least 30 contiguous amino acids in SEQ ID NO: 11 or a derivative, homologue or analogue of said nucleic acid molecule.

20. (Original) The novel nucleic acid molecule according to claim 2 comprising a nucleotide sequence substantially as set forth in SEQ ID NO: 10 or a nucleotide sequence capable of hybridising to the sequence set forth in SEQ ID NO: 10 under low stringency conditions at 42°C or a derivative, homologue or analogue of said nucleic acid molecule.

21. (Original) The nucleic acid molecule according to claim 20 wherein said nucleic acid molecule is a cDNA molecule.

22. (Currently Amended) The nucleic acid molecule according to claim 20 or 21 which encodes an amino acid sequence corresponding to an amino acid sequence set forth in SEQ ID NO: 11 or a sequence having at least about 45% similarity to at least 30 contiguous amino acids in SEQ ID NO: 11 or a derivative, homologue or analogue of said nucleic acid molecule.

23. (Original) The nucleic acid molecule according to claim 3 wherein said complementary nucleotide sequence is substantially as set forth in SEQ ID NO: 3 or 22 or capable of hybridising to the sequence set forth in SEQ ID NO: 3 or 22 under low stringency conditions at 42°C or a derivative, homologue or analogue of said nucleic acid molecule.

24. (**Original**) The nucleic acid molecule according to claim 8 wherein said complementary nucleotide sequence is substantially as set forth in SEQ ID NO: 6 or capable of hybridising to the sequence set forth in SEQ ID NO: 6 under low stringency conditions at 42°C or a derivative, homologue or analogue of said nucleic acid molecule.

25. (**Original**) The novel nucleic acid molecule according to claim 15 comprising a nucleotide sequence substantially as set forth in SEQ ID NO: 9 or a nucleotide sequence capable of hybridising to the sequence set forth in SEQ ID NO: 9 under low stringency conditions at 42°C or a derivative, homologue or analogue of said nucleic acid molecule.

26. (**Original**) The novel nucleic acid molecule according to claim 19 comprising a nucleotide sequence substantially as set forth in SEQ ID NO: 12 or a nucleotide sequence capable of hybridising to the sequence set forth in SEQ ID NO: 12 under low stringency conditions at 42°C or a derivative, homologue or analogue of said nucleic acid molecule.

27. (**Original**) The novel nucleic acid molecule according to claim 2 comprising a nucleotide sequence substantially as set forth in SEQ ID NO: 13 or a nucleotide sequence capable of hybridising to the sequence set forth in SEQ ID NO: 13 under low stringency conditions at 42°C or a derivative, homologue or analogue of said nucleic acid molecule.

28. (**Original**) The nucleic acid molecule according to claim 27 wherein said nucleic acid molecule is a cDNA molecule.

29. (**Currently Amended**) An isolated protein ~~wherein said protein is comprising a~~ DEC-205 intergenic splice variant or a derivative, homologue, analogue, chemical equivalent or mimetic thereof of said protein.

30. (**Original**) An isolated protein according to claim 29 wherein said intergenic splice variant is DEC-205/DCL-1 intergenic splice variant or a derivative, homologue, analogue, chemical equivalent or mimetic thereof of said protein.

31. (**Original**) The protein according to claim 30 having an amino acid sequence substantially as set forth in SEQ ID NO: 2 or SEQ ID NO: 21 or a sequence having at least about 45% similarity to at least 30 contiguous amino acids in SEQ ID NO: 2 or SEQ ID NO: 21 or a derivative, homologue, analogue, chemical equivalent or mimetic of said protein.

32. (**Original**) The protein according to claim 30 encoded by a nucleotide sequence substantially as set forth in SEQ ID NO: 1 or SEQ ID NO: 20 or capable of hybridising to the

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sequence set forth in SEQ ID NO: 1 or SEQ ID NO: 20 under low stringency conditions at 42°C or a derivative, homologue, analogue, chemical equivalent or mimetic of said protein.

33. (**Original**) The protein according to claim 32 wherein said nucleotide sequence encodes an amino acid sequence substantially as set forth in SEQ ID NO: 2 or SEQ ID NO: 21 having at least about 45% similarity to at least 30 contiguous amino acids in SEQ ID NO: 2 or SEQ ID NO: 21 or a derivative, homologue, analogue, chemical equivalent or mimetic of said protein.

34. (**Original**) The protein according to claim 30 having an amino acid sequence substantially as set forth in SEQ ID NO: 5, SEQ ID NO: 8, or SEQ ID NO: 11 or a sequence having at least about 45% similarity to at least 30 contiguous amino acids in SEQ ID NO: 5, SEQ ID NO: 8, or SEQ ID NO: 11, respectively, or a derivative, homologue, analogue, chemical equivalent or mimetic of said protein.

35. (**Original**) The protein according to claim 30 encoded by a nucleotide sequence substantially as set forth in SEQ ID NOS: 4, 7 or 10 or capable of hybridising to the sequence set forth in SEQ ID NOS: 4, 7 or 10 under low stringency conditions at 42°C or a derivative, homologue, analogue, chemical equivalent or mimetic of said protein.

36. (**Original**) The protein according to claim 35 wherein said nucleotide sequence encodes an amino acid sequence substantially as set forth in SEQ ID NOS: 5, 8 or 11 or an amino acid sequence having at least about 45% similarity to at least 30 contiguous amino acids in SEQ ID NOS: 5, 8 or 11 or a derivative, homologue, analogue, chemical equivalent or mimetic of said protein.

37. (**Currently Amended**) The protein according to any one of claims 29 to 36 claim 29 in a homodimeric form.

38. (**Currently Amended**) The protein according to any one of claims 29 to 36 claim 29 in a heterodimeric form.

39. (**Original**) A method of modulating DEC-205 SV expression or DEC-205 SV functional activity in a mammal, said method comprising administering to said mammal an agent for a time and under conditions sufficient to up- regulate, down- regulate or otherwise modulate expression of DEC-205 SV or functioning of DEC-205 SV.

40. (**Original**) A method for modulating DCL-1 expression or DCL-1 functional activity

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in a mammal, said method comprising administering to said mammal an agent for a time and under conditions sufficient to up-regulate, down- regulate or otherwise modulate said expression or functioning.

41. **(Currently Amended)** A method for regulating cellular activity in a subject said method comprising administering to said subject an effective amount of an agent for a time and under conditions sufficient to modulate DEC-205 SV expression ~~or~~ or DEC-205 SV functional activity.

42. **(Original)** A method of regulating cellular activity in a subject said method comprising administering to said subject an effective amount of an agent for a time and conditions sufficient to modulate DCL-1 expression or DCL-1 functional activity.

43. **(Original)** The method according to ~~any one of claims 41 or 42~~ claim 41, wherein said cellular activity is selected from the group consisting of: cellular endocytosis, late endosome targetting, intracellular signalling, Hodgkin and Reed-Sternberg cell functioning ~~or~~ and antigen presenting cell antigen uptake.

44. **(Original)** A method for the treatment and/or prophylaxis of a condition characterized by aberrant, unwanted or otherwise inappropriate functioning of DEC-205 SV or DCL-1 in a subject, said method comprising administering to said subject an effective amount of an agent as hereinbefore defined for a time and under conditions sufficient to modulate the expression of DEC-205 SV or DCL-1 and/or functioning of DEC- 205 SV or DCL-1.

45. **(Original)** A method for the treatment of Hodgkin's lymphoma in a mammal, said method comprising administering to said mammal an effective amount of a cytolytic and/or cytotoxic agent which agent interacts or otherwise associates with DEC-205 SV, for a time and under conditions sufficient for said agent to lyse, apoptose or otherwise kill Hodgkin and Reed-Sternberg cells.

46. – 49. **(Cancelled)**

50. **(Currently Amended)** A pharmaceutical composition comprising at least one of DEC-205 SV, DCL-1, DEC-205 SV, DCL-1 or an agent capable of modulating DEC-205 SV or DCL-1 expression or DEC-205 SV or DCL-1 activity or a derivative, homologue, analogue, chemical equivalent or mimetic thereof together with one or more pharmaceutically acceptable carriers and/or diluents.

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51. (Currently Amended) An isolated antibody directed to the protein according to claim 29 any one of claims 29-38.

52. (Currently Amended) An isolated antibody directed to the nucleic acid molecule according to claim 1 any one of claims 1-28.

53. (Currently Amended) The antibody according to claim 51 or 52 wherein said antibody is a monoclonal antibody.

54. (Currently Amended) The antibody according to claim 51 or 52 wherein said antibody is a polyclonal antibody.

55. (Original) A method of diagnosing or monitoring a mammalian disease condition, which disease condition is characterised by DEC-205 SV and/or DCL-1 expression, said method comprising screening for at least one of DEC-205 SV or DCL- 1 or DEC-205 SV or DCL-1 in a biological sample isolated from said mammal.

56. (Currently Amended) A method for detecting an agent capable of modulating the function of DEC-205 SV or DCL-1 or its functional equivalent or derivative thereof said method comprising contacting a cell or extract thereof ~~containing~~ comprising said DEC-205 SV or DCL-1 or its functional equivalent or derivative with a putative agent and detecting an altered expression phenotype associated with said DEC-205 SV or DCL-1 or its functional equivalent or derivative.